

POPULATION TODAY

Vol. 14, No. 2 February 1986

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Displaced children in Dammour, south of Beirut, Lebanon. See page 5.

PRB

A publication of the Population Reference Bureau, Inc.

FROM THE EDITOR'S DESK

Trivia question—what 830-million subpopulation has almost stopped growing? (0.1 percent annually in 1982 and 1983).

No, not India, not more developed worlders, and not Yuppies. The answer is the economically active population in agriculture (source: *FAO Production Yearbook*). In the years 1980 through 1984, this population has remained in the 830-million range after decades of growth.

The leveling-off of the number of agricultural workers is rather amazing, even bearing in mind that over 40 percent of the world's population still lives on the farm, economically "active" or not. Depending on your mood, you can interpret it as meaning that

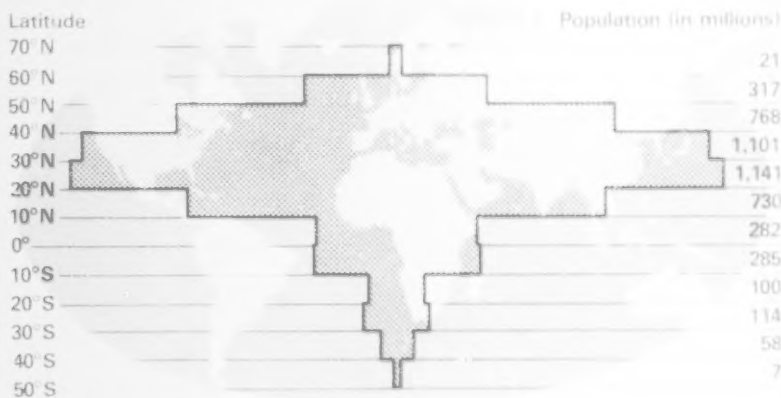
(a) The world's people will never run out of arable land. Thanks to modern methods, no more farm population is needed, and the world can now go on to nonagricultural progress, building

industry, cities, etc. Within a few decades, world agriculture could well be in the same position as U.S. agriculture, i.e., a minuscule population feeding an entire planet of potentially gigantic carrying capacity.

(b) The world's people have just run out of arable land. The land can't support any more people, and the overwhelming majority of future population growth will be nonagricultural. During these same early 1980s years, the world's population grew by over 400 million people, from about 4.4 billion to 4.7 billion.

Take your pick. But "carrying capacity" implies more than the earth's ability to support you. It implies that you can make a place for yourself. And what is happening now is that on an earth where some 44 percent of the jobs are agricultural, for the majority of new job seekers that career choice has largely become passé.

SPEAKING GRAPHICALLY



It's a northern world. As the bar chart above shows, roughly 88 percent of the world's population lives in the Northern Hemisphere, with about two-thirds residing in the northern Temperate Zone. Only one out of eight people lives below the Equator, but no, that doesn't necessarily mean that the Southern Hemisphere is undercivilized (yet).

Chart prepared by Wendy Patrigian using PRB estimates. Chart drawn by George Hager.

POPULATION TODAY

VOL. 14, NO. 2

February 1986

POPULATION TODAY, the newsmagazine of population and demography, is published 11 times a year (a combined issue in July, August) by the Population Reference Bureau, Inc., founded in 1929, a nonprofit organization engaged in the objective dissemination of population information. The views and opinions of **POPULATION TODAY's** contributors are their own and do not necessarily reflect those of PRB.

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Back Issues: Back issues of **POPULATION TODAY** and its predecessor **INTERCOM** are available in limited quantities from PRB for \$2.00 per copy. We cannot tell you **INTERCOM** (ring binders) are still available for only \$1.49 ea.

Mailing: Printed in Washington, D.C. Mailed nonprofit postage rate in the United States; printed offset surface rate to Canada, Mexico, and to foreign subscribers.

Address Changes: Send current PRB address label and new address; please allow eight weeks for change.

Subscription Office: (202) 639-8041

Subscription Dept.

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The New Top 10 and Other Population Vistas

A world with 8.2 billion people, growing at nearly 1 percent annually—that's the picture of the world in 2025 painted in the latest medium variant projections from the UN Population Division.

Ever since World War II, a global transition in the world's population trends has been played out, with the world's growth rate peaking around 1963-1970 (at 2.1 percent). Since then, it's come down. But the overall shape and outcome of world population growth remains a question that challenges demographers.

The latest to be published UN figures projecting the next four decades are unsurprisingly quite similar to the previous set published in 1982. But they are important because they represent the state of the art in the most widely used projections—and because, at least for short-run figures, the UN offers a record of success in hitting the mark. For many years, its medium variant projection has shown a 2000 world population of about 6.1 billion. With 1986's world population of about 4.9 billion growing at about 1.7 percent annually, the UN's 2000 projection seems like a better bet every year. Of course, 2000 gets closer every year too.

What kind of fertility assumptions drive those projections? These figures assume that without exception, fertility will fall in every less developed country, and that all are ultimately headed toward replacement level fertility (about 2.1 lifetime births per woman). The speed with which they're headed, as shown in the UN projection tables, depends upon an individual assessment of each country's fertility history, current trends and anticipated changes, and the status and prospects of family planning programs. (In the case of the low fertility more developed countries [MDCs], it's assumed that fertility will ultimately inch toward replacement level—in these cases, by rising.)

The medium, high, and low variants give a broad spread of reasonable possibilities in each category, with medium the most emphasized—the middle of the fairway, so to speak.

Some sidebars of the next few decades in population growth:

- MDCs could shrink significantly as a proportion of the world population, from 24 percent in 1985 to 17 percent in 2025 in the medium projection.

- Fertility rates in the LDCs have already dropped a great distance from the 6.5 TFR of the 1960-1965 era, to around 3.7 in 1985 (1980's medium vari-

ant). They are projected to descend further—to an average 2.4—over the next 40 years.

- In the year 2025—even at the low variant rate of growth and the low variant population, the world is projected to be adding 46 million people annually (at the high variant, it would be adding 116 million).

Continued on page 8

Population Projections

World	1985	2000	2015	2025
med. var.	4,847	6,122	7,414	8,206
high var.	4,871	6,340	7,879	9,088
low var.	4,839	5,927	6,879	7,358

Less developed countries	1985	2000	2015	2025
med. var.	3,063	3,843	4,639	5,809
high var.	3,094	4,043	5,119	7,572
low var.	3,046	3,680	4,592	6,064

More developed countries	1985	2000	2015	2025
med. var.	1,784	2,277	2,775	2,396
high var.	1,777	2,499	2,764	2,516
low var.	1,771	2,247	2,287	1,294

The Top Ten—1985 and 2025

1985		2025	
country	pop. (millions)	country	pop. (millions)
1. China	1,060	China	1,475
2. India	750	India	1,229
3. USSR	279	USSR	368
4. U.S.	248	Nigeria	338
5. Indonesia	160	U.S.	312
6. Brazil	146	Indonesia	273
7. Japan	123	Brazil	246
8. Bangladesh	101	Bangladesh	219
9. Pakistan	100	Pakistan	210
10. Nigeria	95	Mexico	154

*Medium variant projection

Profile of a Region in Turmoil

Rapid population growth is not the source of the political unrest currently plaguing Central America, though it has been a contributing factor, according to sociologist Sergio Díaz-Briquets in the latest PRB *Population Trends and Public Policy* paper, "Conflict in Central America: The Demographic Dimension."

Seven years after the first signs of political upheaval in Nicaragua, countries in Central America are still at war with themselves. Those countries not threatened with military violence face other enemies, including high population growth rates, continued economic downturns, and widespread poverty. Díaz-Briquets argues that years of political repression and injustice, combined with rapid population increases, caused the current crisis.

Population growth must be put in proper perspective with other underlying causes of instability, writes Díaz-Briquets. Between 1950 and 1970 the region enjoyed broad economic growth, raising popular expectations for political participation. Beginning with the world oil crisis in 1973, however, the region's once-bright future dimmed. Rapid population growth exacerbated the effects of this decline.

Accompanying economic decline were incidents of violence and political unrest. A tradition of unequal land distribution, aggravated by the development of large export-oriented farms that

deprived peasants of their land, added to a sense of social injustice. Education levels, although improved, remained inadequate in many countries. Unemployment increased. The poor masses in urban and rural areas faced substandard living conditions with few social programs. This resulted in bloody uprisings that fueled revolutionary movements.

The region's history has been one of high population growth. Since 1945, Central America's population has tripled in size, straining social and political institutions. During the 1960s, the region had one of the highest population growth rates in the world, only recently have these rates dropped below 3 percent per year.

The UN projects that by the end of the 20th century the region's population will have increased by 60 percent, from its present day 25 million to 40 million. This growth affects employment, education, and standards of living—all contributors to economic and political unrest.

In order to be effective, efforts toward population limitation must be made within the framework of political and economic reform, asserts Díaz-Briquets. Fertility limitation efforts made in isolation from the social reality of the region can be counterproductive, he concludes.

Conflict in Central America: The Demographic Dimension (10 pages) is

available for \$3.00 per single copy; 2-10 copies, \$2.30 each; 11-50 copies, \$1.90 each; 51 or more, \$1.50 each. Orders of \$20 or less must be prepaid and include \$1.00 for postage and handling. Send order and remittance to Circulation Dept., PRB, PO Box 35012, Washington, DC 20013. Make checks payable to PRB.

Turk Workers Remaining in West Germany

With the overthrow of the Menderes regime by the army in 1960, fundamental political and economic changes took place in Turkey. The new military regime was determined to build up the country's economy and to utilize labor migration as a component of modernization and development. It was assumed that the Turkish migrant worker who went to West Germany would improve his vocational skills, acquire modern standards of living, and thus become an innovative change agent who, upon his return to Turkey, would contribute to the modernization of that economy and society.

This concept developed into what became known as the "rotation principle"—the idea that workers should rotate between Turkey and West Germany on a scheduled basis, staying in the host country for a stipulated period of no more than three to five years.

However, in the period between 1973 and 1975 a series of events permanently changed the manner in which the Turkish workers were viewed in West Germany. The oil embargo, the subsequent fourfold increase in the price of crude oil, a period of recession, the unemployment of more than 1 million West German workers, and the growing awareness of the impact of the Turkish workers and their dependents upon German society, all led to the rotation principle becoming obsolete.

Germany imposed a strict immigration ban in 1975. It was assumed that large numbers of Turks would return to their homeland, taking Germany's unemployment problems with them, but nothing of the sort occurred. Since the Turkish workers are not in competition for the same employment opportunities as their German counterparts, unemployment rates



El Salvador's shanties: a sign of the poverty and strife of that country

for the migrants are generally no higher than those for the entire national work force. Furthermore, the severity of their unemployment is cushioned by a variety of unemployment benefits and services. Housing allowances, family children's allowances, and medical care are all available. The sum total of such benefits might easily exceed the option for earned income in Turkey.

The result, in spite of the immigration ban, the Turkish population in West Germany has remained stable to this day due to its high birth rate and to family reunification. Together with their families, the Turkish workers now number 1,191,000 persons, which is 2 percent of Germany's population, or more than one-quarter of all guest workers in West Germany. Today, the number of Turkish workers and their dependents make West Berlin the city with the third largest Turkish population in the world.

*Antar Andereggen
Lewis and Clark College*

Social Security Data Now Available

Results of the 1982 New Beneficiary Survey (NBS), which interviewed 18,399 persons in October-December 1982 and linked their responses to administrative data on benefits, is now available on public use tapes.

The NBS contains representative samples of persons who first received Social Security benefits in mid 1981 to mid 1982.

The survey questionnaire contains a wide range of topics, including household composition, employment history and job characteristics, health, sources and amounts of income received in the last three months, income from assets and holdings, marital history, and child care. First findings of these data are presented in the *Social Security Bulletin* beginning in January 1985.

For more information on NBS or to order, call Joel Packman at 301-594-0348. The NBS data set costs \$150 and is available with documentation on one reel of computer tape.

SURVEY REPORT

Rural Lebanon

Given the present protracted and multifaceted civil war in Lebanon, any demographic data from the country are welcome to those studying the demography of the Arab world. The last census taken in Lebanon was in 1932 and ever since there has been a general lack of any type of demographic data. This statistical void is in part due to political tensions between Palestinians and Christians, a census pointing to a clear numerical majority for one group could be particularly inflammatory. A 1977 French study, however, estimated that the country was 55 percent Muslim.

Lebanon used to be the financial capital of the Middle East, but since 1975 its economy, agricultural sector, communications, roads, and industries have been severely disrupted by civil strife. During the few lulls, the economy showed remarkable recuperative ability, but these resurgences have been short-lived.

In order to update family planning information gathered in 1971, the Lebanon Family Planning Association decided to conduct a new survey as part of the USAID-supported Contraceptive Prevalence Studies II program and with the technical help of Westinghouse Health Systems. Since a national survey was not possible due to hostilities, the survey was conducted in the rural areas of West Bekaa and North and South Lebanon. The new report covers interviews with 1,455 women in West Bekaa and the South only (fieldwork in the North was delayed).

When questioned on their expected family size, the respondents in the South said that they expected to have an average of 5.9 children, while those in West Bekaa said 5.2. This figure was somewhat lower for the younger women—about 3.5 children for women aged 15-19, but the report notes that the sample size for this age group was quite small. The reported number of children ever born indicates that cumulative fertility, however, has been quite high

among rural Lebanese women. Women aged 40-44 in the South said they had had about 8 live births during their lifetimes; those in West Bekaa reported 7.

Knowledge of family planning methods was universal across all age groups, with an average of seven methods known. High percentages of women reported that they had used a modern method at some time: 84 percent in the South and 63 percent in West Bekaa. Of the modern methods, the pill was by far the most popular. At the time of the survey, 47 percent of the Southern women and 41 percent of those in West Bekaa reported that they were actually using some type of method. Larger proportions of women in West Bekaa reported that they were using a traditional method such as rhythm: 38 percent as compared with 15 percent for the South. The lower reported actual fertility in West Bekaa suggests that the traditional methods are not without their effect. There was no evidence in the survey that education, working status, or husband's education or occupation played any role in the likelihood of a woman's using family planning.

When questioned on their desire for additional children, only about 16 percent of those with 1 or 2 children indicated that they wished to cease childbearing; for those with 3-5 children, this figure reached about two-thirds. Thus, based on responses to questions on children expected and the desire for future births, it seems that rural Lebanese women generally plan for about 5 births, 4 at a minimum. With the comparatively good availability of family planning and high husband approval (about 85 to 90 percent), it would appear that rural Lebanese women do have the ability to limit their number of children to some desired number.

Unfortunately, it may be some time before national-level data are available from Lebanon, but this survey does help to fill in some gaps in our knowledge of this troubled country.

—CH

DEMOGRAPHER'S PAGE

Immigration and the Future U.S. Black Population

by John Reid

Blacks have been present in what is now the United States since as early as 1619, when the first slave-bearing ship landed in Virginia. In 1640 the American colonies included 48,768 whites and about 1,600 blacks. By 1790, in the first census taken by the new republic, some 39 million persons were enumerated, of whom 750,000 (or 19.1 percent) were black.

Both the total U.S. population and the black population have grown dramatically since that date. The black population reached 4.4 million just prior to the Civil War and doubled to 8.8 million by 1900. It passed the 15 million mark in 1950 and in the most recent, 1980 Census, 26,488,218 blacks were counted, representing 11.7 percent of the total U.S. population of 226.5 million. By July 1984, that number had increased to 28,609,000, according to Census Bureau estimates.

In the past, such growth was usually explained by natural increase. That is to say, among black Americans, births have always considerably outnumbered deaths, reflecting both a relatively high birth rate and a young population. In more recent years, immigration has become an increasingly important factor in the growth of the black population of the U.S. and should always be considered whenever changes in that racial group are examined.

Black Migration: A Brief History

To be sure, today's black population results entirely from earlier migration—both voluntary and involuntary. There is no consensus on the total number of involuntary migrants. The slave trade between Africa and the

Americas resulted in "an estimated 9.6 million slaves [being] transported to the New World from 1651 until the abolition of slavery in the nineteenth century." This was the greatest slave migration in history in terms of distance and numbers moved. Clearly, a portion of that number came to the colonies and later the United States.

Voluntary immigration by blacks to the United States has been taking place since late in the 19th century, when movements from the West Indies began increasing in numbers. Nevertheless, until recently the issue of their proportion of the total black population has largely been overlooked.

Not only have numbers increased, but the source of the black immigration has shifted dramatically.

An ever-growing proportion of the black U.S. population consists of persons of foreign birth. In the 1980 Census, 815,720 foreign born were counted, representing 3.1 percent of the total black population, the highest proportion ever recorded. This reflects the fact that the immigration level for blacks has increased considerably in recent years, particularly since the changes in U.S. immigration law in 1965, which took effect after 1968.

As race is not tabulated in reports from the Immigration and Naturalization Service (INS), it is not possible to determine the exact number of black immigrants. We have examined country of origin statistics for the 1954-1984 period and made tentative assumptions based on the racial composition of these countries of origin. Clearly, the majority of black immigrants come from the West Indies. The second largest group of foreign born blacks are originally from Africa, followed by South America and Central America.

In 1954 only about 5,000 blacks immigrated to the U.S. As recently as 1970, they still numbered fewer than 50,000. For the five-year period 1980-1984 the average annual number moving to the U.S. has hovered around 80,000. By 1984, the most recent year for which statistics are available, the number amounted to 83,438.

Not only have numbers increased, but the source of the immigration has shifted dramatically. For example, between 1968 and 1984, the number of immigrants from predominantly black African countries has grown from 1,537 to 10,267 per year—an almost seven-fold increase in just 16 years. As a result, the proportion of all black immigrants coming from Africa has grown from 1 percent in 1968 to almost 10 percent in 1984. The number coming from Ethiopia increased from 95 to 2,461, and those from Nigeria rose from 187 to 2,447. In addition, immigrants coming from Guyana increased from 1,148 in 1968 to 8,412 in 1984.

As a result of these demographic shifts, black Americans may be entering a new era and facing challenges reminiscent of those faced by the WASP majority of the white population in the late 19th and early 20th centuries.

Projecting Future Immigration

With that in mind, we have developed projections of the black population for the next 30 years to get some idea of the growing impact of black immigration on the total black population of the nation.

First, we must separate the black population into two groups: native born and foreign born as of the 1980 Census. We then make assumptions about their fertility and mortality behavior. For both we assume that the average number of children per woman will drop from 2.3 to 1.8 by 2030—the latter was the fertility rate for the total U.S. population in 1980, and there is some evidence that convergence is taking place.

We assume similar convergence pat-

terms in mortality with both groups exhibiting declining infant mortality and increasing life expectancy in future years, eventually approaching that for the entire nation. By using similar ratios for both the native-born and foreign-born, we can better illustrate the impact of immigration per se on the total black population.

The table below shows the alternative projections of the black population under different immigration assumptions. If recent immigration levels are maintained for the foreseeable future (about 75,000 per year), the population will reach 45 million by the year 2000 and 44 million by 2030. Should immigration increase to 100,000, the total black population in these years

Clearly we are at the onset of a new era, one in which many different cultures will be competing with each other.

would be somewhat larger: 46 million and 45 million, respectively.

More important than sheer numbers for future years is the proportion of the total black population composed of foreign-born blacks and their descendants. With immigration limited to 75,000 per year, by the turn of the 21st century 7.7 percent of the black population will be comprised of the foreign-born and their descendants. By 2030, close to 13 percent will fall into that category. Raising the immigration level to 100,000 per year, a very plausible possibility, would of course result in a larger proportion of the black population being either foreign-born or the children of foreign-born: 9.2 percent at the turn of the century and 15.7 percent 30 years later.

Within the next half century—in short, the U.S. black population will

U.S. Black Population, 1980-2030, by Levels of Immigration (in thousands)

A: Annual Net Immigration of 75,000

	1980	1990	2000	2010	2020	2030
Native Born	15,300	30,477	32,717	35,296	37,263	38,240
Foreign Born	0	1,994	2,740	3,390	3,687	3,607
Total	15,300	32,471	35,457	38,686	40,948	41,847
% Foreign Born	0	6.1	7.7	8.8	9.0	8.6

B: Annual Net Immigration of 100,000

	1980	1990	2000	2010	2020	2030
Native Born	15,300	30,477	32,717	35,296	37,263	38,240
Foreign Born	0	3,175	5,250	8,000	9,815	11,146
Total	15,300	33,652	37,967	43,296	47,078	49,386
% Foreign Born	0	9.4	13.8	18.5	20.9	22.6

Source: Author's calculations.

consolidate only at the last majority who are descended from slaves, but also of a growing group who are not descendants of slaves. Within the next 50 years, just those black immigrants who arrived in 1980 or later and their U.S.-born descendants will make up 10 to 15 percent of the black population. And this does not include blacks in the U.S. born before 1980 who are not slave descendants.

Black Americans face a new challenge, reminiscent of that faced by white Americans at the turn of the 20th century when millions of Southern and Eastern Europeans immigrated here. Conflict situations arose as the many groups competed among themselves for the benefits offered by the dominant WASP group, hostilities developed between ethnic groups and are present, albeit below the surface, to

this very day.

For American blacks, this is a new situation, where numerous ethnic groups within the racial group will be competing for what little the white power structure offers them.

We have long been accustomed to the English-speaking West Indian population. Today's immigrants speak many different languages, including French Creole, Spanish, Portuguese, Swahili, and other African dialects.

Clearly we are at the onset of a new era, one in which many different cultures will be competing with one another, and hopefully working together as blacks to succeed in this nation. Fortunately, we can benefit from the earlier experiences of the white population as we adjust to this new situation. In this way, hostilities between the long

Demographer's Page

Continued from preceding page

standing and more recent black residents can be kept to a minimum.

Will the newest immigrants be assimilated into the overall black American society or will cultural enclaves continue to exist?

Some blacks would prefer what has been called a "status quo" society, a continuation of the present pattern of coexistence. Others see future demographic changes as marking the onset of a new phase in the changing black American society—a multicultural black society. What direction will be followed not only depends on the intensity of the demographic behavior but on the mode that cultural assimilation will take in future years—in the family, community, school, workplace, and churches—indeed in all the social institutions of the black society.

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2. Edmund K. Leites, *The Aims of the Jewish of the Nations* (New York: Atheneum, 1984), p. 301.
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Population Vistas

Continued from Page 3

• The list of the most populous countries will continue to change, reflecting the long-term population surge in the LDC's. On the list of larger than you might think—countries, as of 2025, ranked no. 12) Ethiopia—111 million; (no. 10) Vietnam—105 million; (no. 14)

the Philippines, 102 million; (no. 15) Iran, 96 million; and (no. 16) Turkey, 92 million (medium variant projections).

• Finally—according to UN staff, the medium variant projection shows that in 2025, as lower fertility has its effect, the age structure of the less developed world will be almost identical to that of the more developed world in 1950, albeit over eight times larger. —A.H.

Growth rate

	1980-84	1985-89	1990-94	2000-04	2020-25
World	1.92	1.88	1.82	1.78	1.56
Developed	1.04	1.00	0.98	0.93	0.29
Developing	2.80	2.76	2.67	2.60	2.62
Least developed	3.20	3.16	3.08	3.03	2.85
Latin America	1.82	1.78	1.72	1.68	1.10
Caribbean	1.82	1.78	1.72	1.68	1.14
Asia	2.4	2.37	2.3	2.24	2.74
South Asia	2.80	2.76	2.67	2.60	2.29
East Asia	1.82	1.78	1.72	1.68	0.55
South East Asia	2.4	2.37	2.3	2.24	2.01

Total Fertility Rate

	1980-84	1985-89	1990-94	2000-04	2020-25
World	2.7	2.6	2.5	2.4	2.4
Developed	1.7	1.6	1.5	1.4	2.7
Developing	3.2	3.1	3.0	2.9	2.0
Least developed	4.2	4.1	4.0	3.9	2.5
Latin America	2.7	2.6	2.5	2.4	2.4
Caribbean	2.7	2.6	2.5	2.4	2.8
Asia	2.8	2.7	2.6	2.5	2.0
South Asia	3.8	3.7	3.6	3.5	2.1
East Asia	2.0	1.9	1.8	1.7	2.1
South East Asia	2.8	2.7	2.6	2.5	2.1
Low rate	1.8	1.8	1.8	1.9	1.9

POSITIONS/ PROFESSIONALS

Program Officer. International Projects Assistance Services, a nonprofit North Carolina-based organization seeks individual knowledgeable in international family planning program development with excellent writing and interpersonal skills. *Qualifications:* degree in public health or related field preferred; some field experience necessary. *Salary:* Moderate; send resume with salary history. *Contact:* Katie E. McLaurin, Acting Executive Director, IPAS, PO Box 300, Carrboro, NC 27510.

SOFTWARE

Life is a public domain game in which colonies of imaginary cells live through immemorial generations of growth and decline. Invented by British mathematician John Conway some 15 years ago, "Life" not only pertains to mathematical theory but also provides some population insights.

The rules are simple. Imagined generations of cells living on a grid from generation to generation: only cells bordering on two or three other cells "survive" the next day; those either too isolated (no contact with other cells) or too crowded (on one or more of five flanks they border on) "die of isolation." Whole, exactly three cells border on an empty square (only cell is born).

That's all. Yet when put through a personal computer, "Life" patterns of reproduction and the devastating effect of changing just one cell in a colony (which may contain dozens or hundreds of cells) have proven endlessly fascinating to mathematicians and computer hackers. Of greatest interest to "Life" devotees has been the search for patterns that resist disintegration and even multiply (the immortal "gliders" and their progenitors the "glider gun").

Particularly during the 1970s, there was a flurry of "Life" articles and even a "Life" newsletter (see Martin Gardner's new book *Wheels, Life, and Other Mathematical Amusements* for a detailed history). Whatever implications "Life" may have for population studies, biology, or mathematics, it is very likely, as master hacker Steven Levy once opined, "the deepest of all computer games."

"Life" can be found on computer bulletin boards in various versions. It is also available for either Apple II or IBM PCs for \$10 per disk from Public Domain Software Copying Co., 33 Gold St., #1-3, New York, NY 10038. 212-732-2565.

WORLD FOOD NEWS

The Food and Agriculture Organization (FAO) of the UN is preparing an in-depth study of agricultural and food problems of Africa. It will be presented at the FAO's Regional Conference for Africa to be held in Brazzaville, Congo, in September 1985. One of the study's principal recommendations is to develop export-oriented agriculture.

FAO Director-General Edmond Keller said the gathering "will make it clear that the agricultural sector is a promising subsector. It will attract the private sector, the financial community, and the business world. It will be a catalyst for the development of the continent."

The 10-day study is part of a

longer term program aimed at putting African agriculture on a sustainable growth path. In departure from previous assessments, it is more concerned with how to implement policies and also considers Africa's problems at the subregional—rather than continental—level, taking into account the ecological diversity ranging from desert to evergreen equatorial forest. Formulation of the study comes during a period of evolution in FAO's programs in which it is now allocating almost 50 percent of its resources to support food and agricultural production in Africa.

Food for Africa is prepared by the Food and Agriculture Organization of the United Nations. Representatives of the United Nations.

POPULATION UPDATE

Estimated United States Population

As of September 1, 1985	239,213,000
As of September 1, 1984	237,000,000

Source: U.S. Census Bureau, *Current Population Reports*, Series P-25, No. 100, 1985. Figures are in millions.

Estimated World Population

As of January 1, 1985	5,000,000,000
As of January 1, 1984	4,900,000,000

Source: U.S. Census Bureau, *Current Population Reports*, Series P-25, No. 100, 1985. Figures are in millions.

Latest Provisional Statistics for the U.S.: September 1985

	12 months ending with September			
	Number	Rate	1984	1985
Births	3,500,000	14.6	13.2	15.9
Deaths	2,011,000	8.4	8.6	8.6
Natural increase	1,489,000	6.2	4.6	7.3
Marriages	2,427,000	10.2	10.1	10.7
Divorces	1,100,000	4.6	4.9	5.2
Infant deaths	10,000	10.4	10.7	11.4
Population, total (in millions)		237.8	239.6	241.2

Note: Rates are given per 1,000 population, except for infant deaths, which are given per 1,000 live births. Rates are based on revised population estimates from the 1980 census.

Source: Monthly Vital Statistics Report (Vol. 34, No. 9) from the National Center for Health Statistics.

TAKE A NUMBER

Latest Fertility Rates: Developed countries continued to show decreases in their total fertility rates (TFR) or gave little evidence of any tendency to rise from recent low levels. These rates, reported in the latest issue of *Population*, also show that the birth rates of most countries of Eastern and Southern Europe continue to converge with the very low rates prevailing in their northern and western neighbors.

In Romania, the TFR was reported at 2.0 (desired births per woman in 1983), which means that Romanian fertility has dropped below the "replacement level" of about 2.3 for the first time since the outlawing of abortion in 1966. Irish fertility now also shows a trend to the downward for a 2.74 TFR in 1983 (from 2.96 in 1982). The following countries showed small decreases in fertility from the year before: 1984, Austria, 1.74; 1983, Belgium, 1.6; Iceland, 2.24; Netherlands, 1.47; the U.K., 1.7; Switzerland, 1.51; Greece, 1.94; Italy, 1.53; Portugal, 1.66; East Germany, 1.79; Bulgaria, 2.00; Canada, 1.66; the U.S., 1.80; and New Zealand, 1.92. 1982, Spain, 1.87; 1981, Yugoslavia, 2.06. Most of these decreases were quite small, of course, with Spain falling the most, a drop of 0.12 from 1981 to 1982.

Increases in TFR were noted in the following countries: 1984, Denmark, with a TFR of 1.40; Hungary, 1.75; and Czechoslovakia, 2.09; 1983, France, 1.81; Poland, 2.40; the USSR, 2.37; Finland, 1.74; and Israel, 1.14; 1982, Japan, 1.75.

Many of these changes are quite small and often result from changes from year to year in the timing of births, while in other cases, real declines in fertility are suggested. (With the above, this column really earns its name!)

Agrarian Demographics: After its long, steady decline, the U.S. farm population may have stopped shrinking. In the 1980 Census, the farm population was 5.1 million. The Census Bureau's estimate for 1984

from the Current Population Survey indicates that the farm population seemed to be leveling off at about 5.8 million. The farm population is defined as persons living on farms or near them, farms being places with customary annual sales of agricultural products of \$3,000 or more.

South and West still growing:

The U.S. population increased by 5.4 percent, or 12.2 million, in 1983 (1982-83) for a 1983 total of nearly 239 million, according to new Census Bureau estimates. The South grew by 8.6 percent and added 8,406,000 people. The West grew by 10.3 and added 4,534,000. Together, the two regions represented 91 percent of national population growth.

In the same period, the Northeast grew modestly, 1.5%, and the Midwest grew very little, 0.6%.

The 10 fastest growing states

were Alaska (29.7 percent), Arizona (17.2), Nevada (16.9), Florida (16.6), Texas (15.0), Utah (12.6), Colorado (11.8), California (11.4), New Mexico (11.1), and Georgia (9.4).

Five states have lost population since 1980— Iowa (-0.1), Michigan (-1.9), Ohio (-0.3), Pennsylvania (-0.1), and West Virginia (-0.7), as well as the District of Columbia (-0).

Here and There . . . For the 12 months ending with September 1983, the U.S. infant mortality rate was 10.4 infant deaths per 1,000 live births, the lowest in history for a 12-month period and the first time that it has rounded to "10"—the effect of a high population growth rate is seen in the age structure of Kenya where the 25-29 year age group numbered 964,000 while those 15-4 were 3,900,000 in 1983.

ADDENDA



Nice Crowd

CURRENT READINGS

PRB welcomes materials on population topics for possible inclusion in Current Readings. Publishers may address review copies to Book Review Editor, POPULATION TODAY, Population Reference Bureau, 1333 M Street, N.W., Washington, D.C. 20004.

AN ENGLISH CHINESE DICTIONARY OF DEMOGRAPHY, by

Xueyuan Tian, Zhaoyang Lin, Xueke Xie, Liqun Cao, and Peichao Chen. Beijing: New World Press, 124 Baiwanzhuang Road, Beijing, China, 1987. 446 pages.

This dictionary is primarily geared to Chinese speakers reading the demographic literature in English. It contains 6000 entries and covers most standard demographic terms, such as the *jure de facto* 55% and age-heaping, and vocabularies from related fields (such as reproductive biology, family planning, economics, and sociology) and the names of many international population organizations including PRB.

There are a few problems with this dictionary. One is the limited usefulness of the pronunciation list of demographic terms. A second is that its format is less a dictionary than an index of demographic vocabulary. However, this book is still a welcome addition to the field. With increasing contacts between Western and Chinese demographic communities, it will undoubtedly prove useful to both Chinese demographers working with demographic literature in English, as well as to those American demographers who speak Chinese and need to communicate in that language with Chinese demographers.

Sally J. Koss

Yuan Zhai

FILTERS AGAINST FOLLY, by

Gallrett Hardin. New York: Viking, 1985. 240 pages. \$15.95. ISBN 0470-80410.

Hardin argues that to understand the world and the consequences of our actions adequately we must use three filters: literacy—what are the words? numeracy—what are the numbers? and (a Hardinian) ecology—and then what? All three, he ar-

gues, are necessary for a sound understanding of any issue.

Hardin remains controversial and irascible as ever, e.g., his well-known concern about overpopulation. Overpopulation favors economic inequality. The redistribution of wealth sought by reformers would increase population and thus secondarily increase inequalities of wealth.

He insists that ecology is conservative. But adds he does not mean the present-day garden-variety conservative who only wants to preserve every mental arrangement that has in the recent past survived some experience (including himself) without asking about the total consequences of the rules by which the worlds were made.

Many readers will dispute such conclusions, and Hardin himself compares his knowledge of political systems with the 16th century's rudimentary understanding of physiology before William Harvey's epochal discovery of blood circulation. There are still worlds to be discovered, he enthuses. In the meantime his conclusions and opinions are, as always, stimulating, and the reader of *Filters Against Folly* will think more deeply and carefully than usual.

Irwin J. Bernstein

THE CHANGING RURAL VILLAGE IN AMERICA, by

Harley J. Johansen and Glenn V. Fuguitt. Cambridge, Mass.: Ballinger Publishing, 1984. 250 pages. \$15.00. ISBN 0084106026.

What functions do rural villages perform? Can they survive in view of changing agricultural technology, which results in changing manpower needs and thus in fewer farms and farm workers?

Questions such as these have been with us for more than 50 years. They were raised as a result of studies done at the University of Wisconsin, and it is fitting that a new study should come from the same school. With a new nationwide sample of villages, and with new data and new

methods of analysis, Johansen and Fuguitt again ask what functions these villages perform and what their future is likely to be. The turnover in migration patterns by which non-metro areas grew as rapidly as metros during the 1970s is thoroughly explored.

A special feature is the detailed analysis of services lost, services gained, and those maintained. There is an analysis of promotional efforts on behalf of individual places. The relevance of theories of regional development and of central place theory is analyzed.

When will someone do a similar study of the large and growing population of rural residents (about four-fifths of the rural total) who do not live in villages?

—Conrad Taeuber

Publications Received

AFRO-AMERICAN DEMOGRAPHY AND URBAN ISSUES: A Bibliography, compiled by K.A. Obudho et al. Westport, Conn.: Greenwood Press, 1985. 433 pages. \$49.95.

DICTIONARY OF DEMOGRAPHY: Biographies, by William Petersen and Renee Peterson. (2 vol.) Westport, Conn.: Greenwood Press, 1985. 1,065 pages. \$125.00.

DICTIONARY OF DEMOGRAPHY: Multilingual Glossary, by William Petersen and Renee Peterson. Westport, Conn.: Greenwood Press, 1985. 270 pages. \$100.00.

HUMAN ECOLOGY AND ETHICAL RELIGIOUS VALUES, by Pedro C. Beltrán. SI-Rome: Pubblicazioni e Documenti della Facoltà di Scienze Sociali della Pontificia Università Gregoriana, 143 pages. \$17.00.

THE FOURTH WAVE: California's Newest Immigrants, by Thomas Muller et al. Washington, D.C.: The Urban Institute Press, 217 pages. \$19.95.

MEXICAN AMERICANS IN COMPARATIVE PERSPECTIVE, edited by Walker Connor. Washington, D.C.: The Urban Institute Press, 173 pages. \$10.00.

WIVES AND DAUGHTERS: The Women of Sixteenth Century England, by Kathy Lynn Emerson. Iroquois, NY: Whitston Publishing, 1984. 407 pages.

WOMEN AND CHANGE IN LATIN AMERICA, by Jane Nash et al. South Hadley, Mass.: Bergin & Garvey Publishers, 1985. 174 pages.

WOMEN IN THE URBAN AND INDUSTRIAL WORKFORCE: Southeast and East Asia, edited by Gavin W. Jones. Distrib. by Univ. of Hawaii Press, Honolulu, Hawaii, 1984. 435 pages. \$19.50.

SPOTLIGHT

CONNECTICUT

Population (1984 est.): 3.15 million
Births per 1,000 pop.(1983): 12.7
Deaths per 1,000 pop.(1983): 8.5
Land area: 4,872 sq. miles
Population per sq. mile (1984): 647.4
Rate of natural increase (1983): 0.96 percent
Percent born in Connecticut now residing there: 58
GNP per capita (1983): \$14,826
Capital: Hartford

by Leon Yacher

Connecticut may be the third-smallest U.S. state in area, but it has the 27th largest population, and ranks fourth in population density.

The main agricultural area of Connecticut is located along the central valley, though urban areas are encroaching on farm land as areas surrounding the state's cities become more populated. The coastline is narrow and mostly settled, especially in the western part of the state. Much of the population is distributed along the central valley and the coast. Connecticut is divided into 169 towns. It used to consist of 8 counties, and though county governments were abolished in 1960, the counties prevail today in spirit, mostly for historical custom and statistical purposes.

Specifically, the 1984 estimated population in Connecticut was 3,154,221 people, growing at a rate of 0.57 percent each year since 1980. The growth between 1970 and 1980 was 2.48 percent (the U.S. as a whole grew 11.4 percent that decade).

Like the U.S. as a whole, Connecticut is highly urbanized. A total of 74.1 percent of the people residing in the state live in urbanized areas while only 11.2 percent are farm residents. Despite such an urbanization pattern, the state's largest cities decreased in population during the 1970-1980 decade, a loss which continues today. Hartford, Connecticut's capital and largest city since 1930, was topped in population by Bridgeport in 1980. Both of these cities lost population during the

1970s, as did the next three largest cities, New Haven, Waterbury, and Stamford. According to 1984 estimates, this downward trend for Connecticut's largest cities continued.

High growth is occurring, however, in areas surrounding the state's cities. This is particularly true in Fairfield County, whose border is located next to New York State and within commuting distance from New York City. These bedroom communities are providing not only the necessary housing for the central cities, but themselves are becoming attractive relocation centers for large corporations moving their headquarters out of pricey New York City. These corporations are moving in search of a more advantageous milieu, not only are Connecticut's suburbs less high-priced, but they can provide an improved ambience for the corporate population, many of whom are already area commuters; examples are General Electric's move to Fairfield, and Union Carbide's move to Danbury, which became especially attractive to population with the completion of Interstate 84, and whose PMSA grew by 5.8 percent from 1980 to 1984, the state's highest rate.

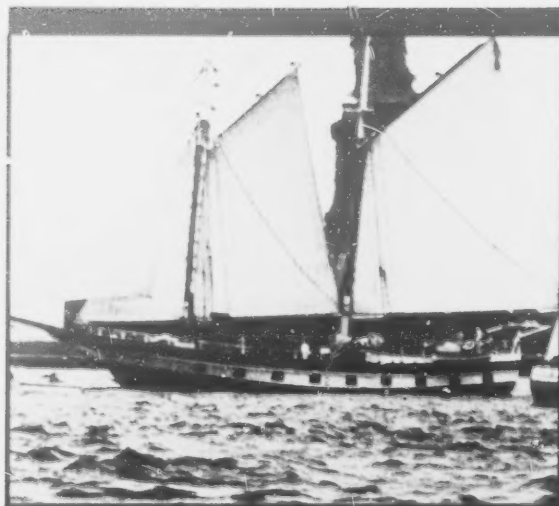
Though Stamford, located 15 miles from Manhattan, has lost population, it has been a real winner in attracting corporations. Some towns near Stamford have also lost population, but the outer hinterland of Stamford has grown faster than other areas of the state. Real estate prices in Stamford and neighboring towns make it one of the most expensive areas in the U.S. In the state's eastern part, and especially on the coast, many small towns have also grown dramatically. At the aggregate level, between 1970 and 1980, counties with smaller populations grew at higher rates than counties with larger populations. The pattern is continuing at

present. Hartford County displayed a population loss between 1970 and 1980, though as of 1984 a modest reversal has been noted.

Connecticut's population is not particularly old, with a median age of 28.6. The state's population under 15 years of age is 20.8 percent, compared with the U.S. average of 22.6 percent, while 11.7 percent (U.S. 11.3) of the population is 65 years of age or older. Birth rates have increased slightly from 12.4 per 1,000 in 1979 to 1983's rate of 12.7 per 1,000. Immigration is an important factor in Connecticut, where 8.5 percent (compared to 6.2 percent nationally) of the population is foreign born. At present, Mexico is the leading country supplying immigrants into the state.

Economically, the state relies on manufacturing; 30.4 percent of the population works in this industry. Only 1 percent of the labor force is employed in agriculture. For the future, Connecticut can continue to expect corporate influx, as the tax base is very favorable for long term relocation. The state does not have an income tax, and introduction of such is unlikely in the foreseeable future.

Leon Yacher is assistant professor of geography, Southern Connecticut State University.



The Mystic Whaler, of historic Mystic, Conn.